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EXAMINER

RASHID, DAVID

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Attachment to Paper 20080702

[1] Applicant's arguments filed June 19, 2008 with respect to **claims 1, 10, 18, and 22-24** have been respectfully and fully considered, but they are not found persuasive.

Summary of Remarks regarding claims 1 and 24

(i) At 4:41-47, *Latta* notes, "[t]he knife-edge technique allows the system to distinguish from the upper and lower apertures 66 and 68 in the mask of fig. 3," cited by the Examiner on page 4 of the Office Action. This is different from using the knife-edge to block a zero order diffraction pattern because *Latta*, at most, teaches blocking light from upper and lower parts of a mask pattern without taking pixel diffraction pattern into account. *Latta* is silent about "using a knife-edge to block ...a zero order diffraction pattern," as recited in claims 1 and 24.

(ii) *Latta* recommends using a dual knife edge focus error technique in figs. 5A-B to overcome the drawbacks of a single knife-edge technique (*see*, 4:40- 41 and 45-50 of *Latta*). Therefore, *Latta* explicitly teaches that using a knife-edge, from one side, is a problem, and thus, teaches away from claims 1 and 24. One skilled in the art, after reading *Latta*, would be discouraged from using a semi-plane knife edge technique, as recited in claims 1 and 24, and would tend to use a dual knife-edge technique instead. *See* M.P.E.P. §§ 2141.02 and 2145(X)(D)(2); *Gillette Co. v. S.C. Johnson & Son, Inc.*, 919 F.2d 720, 16 U.S.P.Q.2d 1933 (Fed. Cir. 1990).

Examiner's Response regarding claims 1 and 24

(i) However, Applicant's argument that "[t]his is different from using a knife-edge to block a zero order diffraction pattern because *Latta*, at most, teaches blocking light from upper and

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lower parts of a mask pattern without taking pixel diffraction pattern into account” (emphasis added) appears to be an argument not relying on factual evidence from the prior art of record, but a mere allegation. It would have been obvious to one of ordinary skill in the art at the time the invention was made for a pixel diffraction pattern as taught by *Sandstrom* in view of *Yonekubo* to use a semi-plane knife-edge to block from one side as taught by Latta AND for the pixel diffraction pattern as taught by *Sandstrom* to have such a size as to include an upper and lower part of a mask pattern as taught by Latta (this statement is inherent to the original statement, for as the pixel diffraction pattern as taught by *Sandstrom* to be effected by the semi-plane knife-edge it would have to be such a size as to be effected by the semi-plane knife-edge, that size being at least big enough to include an upper and lower part of a mask pattern as taught by Latta) as “[t]he knife-edge technique allows the system to distinguish between light coming from the upper and lower apertures 66 and 68 in the mask...and on the other side of the focus it blocks light from the lower aperture”, *Latta*, 4:41-47.

(ii) However, in addition to Applicant’s argument that the prior art must be considered in its entirety, including disclosures that teach away from the claims, “the prior art’s mere disclosure of more than one alternative does not constitute a teaching away from any of these alternatives because such disclosure does not criticize, discredit, or otherwise discourage the solution claimed....” *In re Fulton*, 391 F.3d 1195, 1201, 73 USPQ2d 1141, 1146 (Fed. Cir. 2004). See MPEP § 2141.02 and MPEP § 2123.

Though the Examiner acknowledges the Applicant correctly identified an alternative “dual-knife edge embodiment” from the “knife-edge embodiment”, and that both embodiments must be considered in its entirety in view of MPEP § 2141.02 and MPEP § 2123, the “dual-knife

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edge embodiment” also anticipates “using a semi-plane knife-edge to block, from one side.”

Furthermore, the Examiner finds that the “dual-knife edge embodiment” is nothing more than two knife-edges, for which only one of the two knife-edges anticipates (and thus the “dual-knife edge embodiment” anticipates). The Examiner in light of the “dual-knife edge embodiment” would be able to select one of the knife edges to allow read on the claims in question. The Examiner regards Applicant’s teaching-away argument in this respect moot in view of the broad claim language that would allow both embodiments to be anticipated. The Examiner recommends to further limit the claim to strictly allow only one knife-edge.

The examiner believes that the effect of “teaching away” in the sense of §2100 not only includes that one embodiment discredits another, but that the embodiment that discredits the other must also not be able to read on the claim as well (for if both embodiments anticipate the claim element in question, it is the same for which one cannot be “taught away” from the other).

Summary of Remarks regarding claims 10 and 18

Thus, *Evans* is not used to teach or suggest the above-recited feature of claims 1 and 24, nor does *Evans* teach or suggest this feature. Because claims 10 and 18 include all features of claims 1 and 24, claims 10 and 18 necessarily include this feature. Given that none of the applied references teach this feature, claims 10 and 18 are not obvious in view of *Sandstrom*, *Yonekubo*, *Latta* and *Evans*.

Examiner's Response regarding claims 10 and 18

However, refer to the argument above as *Sandstrom* in view of *Yonekubo*, *Latta* anticipate claims 1 and 24.

Summary of Remarks regarding claims 22 and 23

Thus, *Pedersen* is not used to teach or suggest the above-recited feature of claims 1 and 24, nor does *Pedersen* teach or suggest this feature. Because claims 22 and 23 include all features of claims 1 and 24, claims 22 and 23 necessarily include this feature. Given that none of the applied references teach this feature, claims 22 and 23 are not obvious in view of *Sandstrom*, *Yonekubo*, *Latta* and *Pedersen*.

Examiner's Response regarding claims 22 and 23

However, refer to the argument above as *Sandstrom* in view of *Yonekubo*, *Latta* anticipate claims 1 and 24.

/David P. Rashid/
Examiner, Art Unit 2624